Amendments to the Claims

Please amend Claims 1, 7, 13, and 19-21. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A computerized interface for managing a dialog between a computer and a user of the computer, the computer having an audio input device, a text input device, a visual output device, and an audio output device, the computerized interface comprising:

a prioritized speak queue for retaining responses generated by the computer in response to spoken input from the user asynchronously received by the computer through the audio input device, the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user, the computer running multiple applications and the reasoning facility interpreting the spoken input in a manner that at least one of the multiple applications recognizes the interpreted spoken input;

a dialog manager for placing the generated responses in the prioritized speak queue; and

a turn manager for managing audible rendering of the responses from the prioritized speak queue through the audio output device, the turn manager prioritizing audible rendering of the responses according to rules other than the order in which the responses are added to the prioritized speak queue and according to corresponding contexts in a context priority queue so that the user receives each response as part of an asynchronous dialog between the computer and the user, the turn manager conducting the dialog in a polite non-interruptive manner that is subject to control by the user including allowing the user to change subjects and allowing the user to interrupt the dialog but not allowing the audible rendering of a response to interrupt the user.

2. (Original) The interface of Claim 1, wherein the turn manager is subject to behavioral goals that include:

providing speech output including audible renditions of the responses when spoken to by

the user;

asking permission of the user before providing speech output based on delayed answers and notifications; and

allowing the user to (i) change subject and/or (ii) interrupt in the dialog.

3. (Original) The interface of Claim 1, wherein the turn manager provides the audible rendering of the responses in a delivery mode subject to selection by the user.

4. (Original) The interface of Claim 3, wherein the delivery mode is one of an immediate delivery mode and a delayed delivery mode.

5. (Original) The interface of Claim 1, wherein the turn manager manages the audible rendering of the responses based on dialog states that specify the current state of the dialog between the computer and the user.

6. (Original) The interface of Claim 1, wherein the response is an announcement of an event of interest to the user as determined by the computer.

7. (Currently Amended) A method for managing a dialog between a computer and a user of the computer, the computer having an audio input device, a text input device, a visual output device, and an audio output device, the method comprising the computer-implemented steps of:

receiving responses generated by the computer in response to spoken input from the user asynchronously received by the computer through the audio input device;

placing the generated responses in a prioritized speak queue, the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user, the computer running multiple applications and the reasoning facility interpreting the spoken input in a manner that at least one of the multiple applications recognizes the interpreted spoken input; and

managing audible rendering of the responses from the prioritized speak queue through the audio output device, prioritizing the audible rendering of the responses according to rules other

than the order in which the responses are added to the prioritized speak queue and according to corresponding contexts in a context priority queue so that the user receives each response as part of an asynchronous dialog between the computer and the user, the dialog conducted in a polite non-interruptive manner that is subject to control by the user including allowing the user to change subjects and allowing the user to interrupt the dialog but not allowing the audible rendering of a response to interrupt the user.

8. (Original) The method of Claim 7, wherein the step of managing the audible rendering of the responses is performed subject to behavioral goals that include:

providing speech output including audible renditions of the responses when spoken to by the user;

asking permission of the user before providing speech output based on delayed answers and notifications; and

allowing the user to (i) change subject and/or (ii) interrupt in the dialog.

9. (Original) The method of Claim 7, wherein the step of managing the audible rendering of responses is performed in a delivery mode subject to selection by the user.

10. (Original) The method of Claim 9, wherein the delivery mode is one of an immediate delivery mode and a delayed delivery mode.

11. (Original) The method of Claim 7, wherein the step of managing the audible rendering of the responses is based on dialog states that specify the current state of the dialog between the computer and the user.

12. (Original) The method of Claim 7, wherein the response is an announcement of an event of interest to the user as determined by the computer.

13. (Currently Amended) A computer program product comprising:

a tangible computer usable program product for managing a dialog between a computer and a user of the computer; and

a set of computer program instructions embodied on the tangible computer usable program product, including instructions to:

receive responses generated by the computer in response to spoken input from the user asynchronously received by the computer through the audio input device;

place the generated responses in a prioritized speak queue, the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user, the computer running multiple applications and the reasoning facility interpreting the spoken input in a manner that at least one of the multiple applications recognizes the interpreted spoken input; and

manage audible rendering of the responses from the prioritized speak queue through the audio output device, prioritizing the audible rendering of the responses according to rules other than the order in which the responses are added to the prioritized speak queue and according to corresponding contexts in a context priority queue so that the user receives each response as part of an asynchronous dialog between the computer and the user, the dialog conducted in a polite non-interruptive manner that is subject to control by the user including allowing the user to change subjects and allowing the user to interrupt the dialog but not allowing the audible rendering of a response to interrupt the user.

14. (Original) The computer program product of Claim 13, wherein the set of computer instructions comprises further instructions to manage the audible rendering of the responses subject to behavioral goals that include:

providing speech output including audible renditions of the responses when spoken to by the user;

asking permission of the user before providing speech output based on delayed answers and notifications; and

allowing the user to (i) change subject and/or (ii) interrupt in the dialog.

15. (Original) The computer program product of Claim 13, wherein the set of computer instructions comprises further instructions to manage the audible rendering of responses based on a delivery mode subject to selection by the user.

16. (Original) The computer program product of Claim 15, wherein the delivery mode is one of an immediate delivery mode and a delayed delivery mode.

17. (Original) The computer program product of Claim 13, wherein the set of computer instructions comprises further instructions to manage the audible rendering of the responses based on dialog states that specify the current state of the dialog between the computer and the user.

18. (Original) The computer program product of Claim 13, wherein the response is an announcement of an event of interest to the user as determined by the computer.

19. (Currently Amended) A computerized interface for managing a dialog between a computer and a user of the computer, the computer having an audio input device, a text input device, a visual output device, and an audio output device, the computerized interface comprising:

a prioritized speak queue for retaining responses generated by the computer in response to spoken input from the user asynchronously received by the computer through the audio input device, the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user, the computer running multiple applications and the reasoning facility interpreting the spoken input in a manner that at least one of the multiple applications recognizes the interpreted spoken input;

means for placing the generated responses in the prioritized speak queue; and

means for managing audible rendering of the responses from the prioritized speak queue through the audio output device, the turn manager prioritizing audible rendering of the responses according to rules other than the order in which the responses are added to the prioritized speak queue and according to corresponding contexts in a context priority queue so that the user

receives each response as part of an asynchronous dialog between the computer and the user, the dialog conducted in a polite non-interruptive manner that is subject to control by the user including allowing the user to change subjects and allowing the user to interrupt the dialog but not allowing the audible rendering of a response to interrupt the user.

20. (Currently Amended) A computer program propagated signal product comprising:

a ~~tangible~~ computer usable propagated signal product for managing a dialog between a computer and a user of the computer; and

a set of computer program instructions embodied on the ~~tangible~~ computer usable propagated signal product, including instructions to:

receive responses generated by the computer to spoken input from the user and asynchronously received by the computer through the audio input device;

place the generated responses in a prioritized speak queue, the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user, the computer running multiple applications and the reasoning facility interpreting the spoken input in a manner that at least one of the multiple applications recognizes the interpreted spoken input; and

manage audible rendering of the responses from the prioritized speak queue through the audio output device, prioritizing the audible rendering of the responses according to rules other than the order in which the responses are added to the prioritized speak queue and according to corresponding contexts in a context priority queue so that the user receives each response as part of an asynchronous dialog between the computer and the user, the dialog conducted in a polite non-interruptive manner that is subject to control by the user including allowing the user to change subjects and allowing the user to interrupt the dialog but not allowing the audible rendering of a response to interrupt the user.

21. (Currently Amended) The interface of Claim 1, wherein the ~~domain model includes~~ dialog manager and the turn manager have access to application specific knowledge in an application domain model for external applications.